

# USCMS Engineer Status Report for July 2003

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July 23, 2004

## 1 Work Performed This Month

I performed the following work during the month of June:

1. File transfer

(1). Under the request of Tim Barrass, I revived the DC04 agents for file transfer. Initially, due to a certificate problem at cern, srm client can't conduct third part transfer. I had to modify the script to first transfer the files to local disk, then transfer them to dCache/Enstore. Later, I had to modify another version of script to conduct third-party file transfer similar to DC04. Various issues related to srmcp, cern srm WSDL, file organization in enstore, etc. were solved. I got a lot of help from Jon and Timur.

(2). Continue monitoring the HCAL Testbeam data transfer. I made some improvement on the code. And working with testbeam people, the transfer scripts now send e-mail notification when a file is transferred. And an analysis reco program (by testbeam people) conducts data processing once it receives the e-mail. This achieves near real-time data analysis at Fermilab side.

(3). Helped Nikolai Terentiev from Muon test beam team with the data transfer. Basically, they heard the HCAL data transfer was doing well. So they wanted to transfer their data using similar method. I e-mailed my scripts and helped them with some questions.

(4). Wrote a script for Jon to check how many files/total sizes were transferred to Fermilab every week. He mentioned Vicky wanted to know those numbers on a weekly basis.

(5). Spent some time to comment on Tim's new TMDB schema and SQL.

2. Globus RLS

Following Lothar's suggestions on the RLS performance evaluation. I did the following:

(1). DC04 use cases were collected; (2). A script is written to download the DC04 entries in the CMS POOL MySQL file catalog and separate them into two groups: unique LFN+PFN group, and extra LFN+PFN group; (3). Globus/ISI LRC server and client were installed on different machines. Due to the server crash while doing the tests. The server was moved to a machine with much more CPU and memory; (4). A set of test scripts were written to populate the RLS server using rls client program under single or multiple clients. And scripts were also written to query, delete the entries in the LRC server; (5). A sequence of tests were conducted using the developed scripts and an initial report was written. (6). A problem related to LRC server crash caused me to spend quite some time. I reported this to the RLS developer and a temper solution was found. (7). An initial report was written on Globus RLS performance.

### 3. Others

(1). Helped John Weigand with host certificate issue; (2). Ramen disk was broken and caused all the services to halt. I was asked to help with Lisa on restoring the services on ramen (reinstall, configure,.....).

## 2 Status of Deliverables

1. Globus RLS performance final report will be out; 2. Proposal to further work on the RLS and CMS applications;

## 3 Plans For Next Month

1. I plan to continue work on the Globus RLS performance evaluation and possible CMS application; 2. I plan to continue work on the file transfer;

## 4 Longer Term Plans

Need talk with the management.

## **5 Resources Needed**

None.

## **6 Links To Supporting Documentation**

- None.